



VOL. 1, PP. 17-40.

FEBRUARY 10, 1904.

## INVERTEBRATA PACIFICA

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### DIPTERA

#### REPORTS ON CALIFORNIAN AND NEVADAN DIPTERA, I.

C. F. BAKER.

Only through the kindly interest of Mr. D. W. Coquillett of the National Museum, does it become possible to publish these first results of the collection of the past year, at this time. Acknowledgments are also due Prof. J. M. Aldrich for the determination of most of the Dolichopodidae.

The material recorded herein was all collected in three regions, Ormsby County, Nevada, the vicinity of Stanford University, California, and about Claremont, Los Angeles County, California. The work done so far has been anything but thorough, and taken all together represents but very few hours actual labor. Indeed, the results are but a by-product of other very pressing work. It will be noted that the Stanford material is composed entirely of vernal and autumnal species, since I have never been there through the midsummer.

All the Nevadan material was taken by my wife or myself about our summer camp in the head of King's Canyon west of Carson City. The tents were placed just within the pines. Near them, in a tangled patch of willows and alders, welled up a small spring which supplied a few acres of meadow on the hillside below. Quite a variety of herbaceous plants grew in this vicinity. On the other side a few steps carried one among the sage and rabbit-brush (*Chrysothamnus*). Even though so manifestly incomplete, still the comparison of these collections is very

interesting, the Californian from west of the Sierras and the Nevadan from close up on the eastern slope.

The vicinity of Stanford University furnishes a wealth of Diptera which I have not seen equalled anywhere in the West. There are ponds, streams, rich woods, pastures, and finally salt marshes, all near by. The richness of the region may be inferred from the large number of new species resulting from the small amount of very superficial work done by me.

At Claremont and vicinity, in the typical Southern California country, work has just begun. It will be continued with unremitting perseverance in both California and Nevada.\*

#### MYCETOPHILIDAE.

1728 *BOLITOPHILA HYBRIDA* Meig. Stanford University.

82 *MYCETOPHILA OBSCURA* Walk Stanford University. This species was abundant about Lagunita in the early spring.

1729 *Mycetophila trifasciata* Coquillet, new species.

Head black, antennae brown, the base yellow. Mesonotum reddish brown, opaque, the narrow front margin and broad front angles yellow, its short hairs yellow, the lateral bristles brown, pleura black and with a few small yellow spots, pteropleura bearing a row of black bristles, scutellum chiefly yellow. Abdomen black, the genitalia yellow. Legs and halteres yellow, apices of tarsi, of middle and hind coxae and of their tibiae, also apices of hind femora, black; middle and hind tibiae bearing two rows of black bristles on their outer sides, the middle tibiae with two long bristles near the middle of the inner side. Wings hyaline, and marked with three brown cross-bands; the first band begins on the costa and extends into the second basal cell, passing over the small crossvein; a large brownish spot behind the fifth vein appears to represent the continuation of this band; the second band crosses the wing from just before apex of the first vein to apices of forks of the fifth vein, filling the cell formed by these forks, behind which it is abruptly narrowed to about half its previous width; the third band fills the apex of the wing from a short distance beyond apex of first vein to apex of upper branch of fifth vein; the latter vein forks far beyond the forking of the fourth, its forks rather narrowly sepa-

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\*A list of the first century of Diptera to be issued in the Invertebrata Pacifica series will be published before long, with the first report on Nicaraguan Diptera collected last winter.

rated, converging toward their apices. Length 2.5 mm. Five males. Stanford University, California. Type No. 7665, U. S. National Museum.

1730 *Mycetophila fenestrata* Coquillet, new species.

Near *trifasciata*, but differing as follows: No brown coloring at apex of any coxa or femur, inner side of middle tibiae with a single short bristle near the middle. Wings having the first brown band not beginning at the costa, but at the first vein, the brown spot behind the fifth vein very faint, the second band coalesces with the third along the costa and again along the forks of the fourth vein, enclosing an oval hyaline spot just below the third vein; neither of these two bands pass beyond the lower fork of the fourth vein, although the wing is faintly bordered with gray from the apex of this fork to a short distance beyond apex of lower fork of fifth vein; the latter vein forks only a short distance beyond the forking of the fourth, its two forks widely separated and not converging toward their apices. Length 3 mm. A single specimen. Stanford University, California. Type No. 7666, U. S. National Museum.

1731 *Neoempheria pullata* Coquillet, new species.

Brown, the first two joints of antennae, humeri, genitalia and legs, yellow, the latter changing to brownish toward apices of tarsi; antennae over twice as long as the head and thorax, joints of flagellum very elongate, the third joint of antennae about five times as long as wide; body opaque, the hairs and bristles black; bristles of tibiae shorter than greatest diameter of the latter; wings hyaline, pubescent, auxiliary vein terminates in the first slightly before middle of marginal cell, this cell about three times as long as wide, third vein strongly bowed forward, peduncle of second posterior cell about five times as long as the small crossvein, fifth vein forks at about one-fourth of distance from its base to the small crossvein. Length 3.5 mm. A male specimen. Stanford University, California. Type No. 7667, U. S. National Museum.

1732 *Sciophila calcarata* Coquillet, new species.

Black, the extreme base of third joint of antennae, halteres, genitalia largely, femora, tibiae and base of first joint of tarsi, yellow; third joint of antennae nearly three times as long as broad, the following joints longer than wide; body opaque, gray pruinose, mesonotum marked with three black vittae, the middle one divided medially by a gray line, hairs and bristles of thorax black; middle coxae bearing at apex of front side a forwardly directed, two-pointed spur which is almost half as long as the coxae; bristles of tibiae shorter than the greatest diameter of the latter; wings pubescent, hyaline, auxiliary vein terminates near middle of marginal cell, the subcostal crossvein slightly before the middle of this cell, the latter about one and one-half times as long

as broad, first and third veins strongly bowed forward, peduncle of second posterior cell about half as long as the anterior branch of the fourth vein, fifth vein forks slightly before base of first posterior cell. Length 4 mm. Ten males. Stanford University, California. Type No. 7668, U. S. National Museum.

#### CULICIDAE.

- 154 *CULEX INCIDENS* Thom. Ormsby County, Nevada.  
 957 *CULEX CONSOBRINUS* Desv. Ormsby County, Nevada.  
 958 *CULEX TARSALIS* Coq. Ormsby County, Nevada.

#### TIPULIDAE.

- 102 *HOLORUSIA GRANDIS* Bergroth. Ormsby County, Nevada.  
 Common.

#### BIBIONIDAE.

- 566 *BIBIO HIRTUS* Lw. Stanford University.  
 1733 *SCATOPSE NOTATA* L. Stanford University.  
 129 *DILOPHUS BREVICEPS* Lw. Ormsby County, Nevada.  
 1734 *Dilophus occipitalis* Coquillet, new species.

Black, a few indistinct spots on lower part of head, extreme base of antennae, prothorax except a streak each side, mesonotum, pleura except one or two spots and the lower portion, coxae and femora, yellow, stalks of halteres whitish; head narrow and elongate, about three-fourths as long as the thorax, cheeks about as wide as height of eyes, distance from upper end of eyes to highest point on the occiput about half the height of the eyes; body polished; hairs chiefly whitish; wings hyaline, stigma black; front tibiae bearing two whorls of spines, one above the middle, the other at the apex. Length 3 mm. A female specimen. Claremont, Los Angeles County, California. Type No. 7669, U. S. National Museum.

- 128 *DILOPHUS SERRATICOLLIS* Wlk. Ormsby County, Nevada.

#### LEPTIDAE.

- 1735 *SYMPHOROMYIA JOHNSONI* Coq. Ormsby County, Nevada.  
 1736 *SYMPHOROMYIA LATIPALPIS* Bigot. Ormsby County, Nevada.  
 88 *CHRYSOPILA PROXIMA* Wlk. Ormsby County, Nevada.  
 1737 *CHRYSOPILA TESTACEIPES* Bigot. Ormsby County, Nevada.  
 1738 *Leptis flavonigra* Coquillet, new species.

Black, the apex of scutellum, halteres, tibiae, apices of front and middle femora and bases of their tarsi, also the abdomen, yellow, a large spot on sides of the fourth and fifth segments, the ventral portion of these segments and nearly the whole of the fol-

lowing segments, black; sides of face whitish pilose, hairs of body chiefly black; mesonotum dark gray pruinose, two vittae and the lateral margins whitish gray pruinose; wings hyaline, tinged with yellowish at base and along the costa, stigma brownish. Length 7 mm. A female specimen. Type No. 6708. U. S. National Museum. Ormsby County, Nevada.

565 *LEPTIS INCISA* Lw. Stanford University.

1739 *Pheneus opacus* Coquillet, new species.

Black, the first two joints of antennae, proboscis, bases of segments two to six of abdomen, stems of halteres, coxae, front and middle femora and their tibiae, also bases of tarsi, yellow, the very elongate hind femora and tibiae dark brown; head gray pruinose, face and lower part of front slightly over twice as wide as distance between the posterior ocelli, front greatly widening towards the vertex, at the lowest ocellus twice as wide as at lower edge; first joint of antennae one and one-half times as long as the second, the latter almost as long as the third, the two last mentioned joints slightly wider than long, arista nearly one and one-half times as long as the antennae proper, indistinctly three-jointed, the first joint twice as long as wide, the second slightly over twice as long as the first, the two together two-thirds as long as remainder of arista; occiput strongly convex; thorax opaque, grayish pruinose, mesonotum marked with three blackish vittae, the median one divided by a gray line; abdomen polished; wings hyaline, veins black, fourth posterior cell closed in one wing but distinctly open on the other, anal cell narrowly open. Length 5 mm. A male specimen. Type No. 6707, U. S. National Museum. Ormsby County, Nevada.

#### STRATIOMYIDAE.

133 *SARGUS VIRIDIS* Say. Ormsby County, Nevada and Stanford University.

134 *BERIS ANNULIFERA* Bigot. Ormsby County, Nevada.

738 *STRATIOMYS MACULOSA* Lw. Ormsby County, Nevada:

24 *ODONTOMYIA ARCUATA* Say. Stanford University.

736 *ODONTOMYIA BINOTATA* Lw. Stanford University.

970 *ODONTOMYIA INAEQUALIS* Lw. Stanford University.

38 *NEMOTELUS TRISTIS* Bigot. Stanford University.

#### TABANIDAE.

1740 *CHRYSOPS NOCTIFER* OS. Stanford University.

109 *CHRYSOPS SURDUS* OS. Ormsby County, Nevada.

1741 *Tabanus opacus* Coquillet, new species.

Near *rhombicus*, but the frontal subcallus is gray pruinose, the gray spots of abdomen greater in number and extent, etc. Black,

the base of the third antennal joint and antalar callosity reddish yellow, broad sides of second, third and fourth abdominal segments except a large spot on each, also a large portion of the venter and the tibiae except apical half of front ones, yellowish, palpi and knobs of halteres whitish; head wider than thorax, front of female strongly narrowed below, gray pruinose, the callous polished, shield shaped, a partially denuded oval spot above it connected by a narrow line, ocellar spot somewhat denuded but not elevated, eyes pubescent, purplish, each marked with two or three greenish bands, third joint of antennae broad, the upper angle blunt, palpi rather short and very robust, hairs of last joint chiefly black in the female, white in the male; mesonotum gray pruinose, marked with six black vittae, the hairs black and mixed with a few yellowish ones, hairs of pleura white, many black ones on the upper portion; segments two to six of abdomen each marked with three gray pruinose spots contiguous to the narrow gray hind margin, each spot extending across, or nearly across, the segment; wings subhyaline, a small faint brownish cloud at forking of the third vein, this fork not appendiculate, outer portion of first posterior cell with parallel sides. Length, male 12, female 15 mm. A specimen of each sex. Ormsby County, Nevada. Type No. 7319, U. S. National Museum.

114 *TABANUS PUNCTIFER* OS. Ormsby County, Nevada.

#### ASILIDAE.

155 *DIOTRIA PUSIO* OS. Ormsby County, Nevada.

974 *SCLEROPOGON INQUINATUS* Lw. Ormsby County, Nevada.

104 *ERAX DUBIUS* Will. Ormsby County, Nevada.

105 *ASILUS CALLIDUS* Will. Ormsby County, Nevada.

1742 *ASILUS ANGUSTIFRONS* Will. Ormsby County, Nevada.

1018 *MALLOPHORA FAUTRIX* OS. Claremont, Los Angeles County, California.

#### BOMBYLIDAE.

1743 *EXOPROSOPA TITUBANS* OS. Ormsby County, Nevada.

1744 *SYSTOECHUS OREAS* OS. Ormsby County, Nevada.

116 *ANTHRAX MORIO* L. Ormsby County, Nevada.

1204 *PHTHIRIA SULPHUREA* Lw. Claremont, California and also in Ormsby County, Nevada.

1745 *GERON SUBAURATUS* Lw. Ormsby County, Nevada.

1746 *PANTARBES PUSIO* OS. Ormsby County, Nevada.

#### THEREVIDAE.

119 *PSILOCEPHALA COSTALIS* Lw. Ormsby County, Nevada.

117 *THEREVA DUPLICIS* Coq. Ormsby County, Nevada.

1747 *Thereva flavicauda* Coquillet, new species.

Black, the antennae, legs, halteres and apex of abdomen, yellow; apex of antennae brown, coxae, front femora except their apices, and basal half of middle femora black, apices of tarsi brown, a brown spot at bases of knobs of halteres; the yellow of abdomen occurs on hind margins of third, fourth and fifth segments and whole of the portion beyond the latter; front opaque, yellowish gray pruinose, a transverse pair of polished black spots near the middle, the hairs below the latter black, followed by yellowish white ones, like those of the face, first joint of antennae slightly longer than the third, the under side densely yellowish white pilose and bearing a few black bristles, third joint oval, twice as long as wide, about six times as long as the style; thorax bluish gray pruinose, mesonotum marked with two yellowish gray vittae, its hairs chiefly black; abdomen opaque, gray pruinose, the fifth and sixth segments slightly polished, the following two highly polished, hairs of abdomen almost wholly pale yellowish; wings grayish hyaline, veins indistinctly bordered with smoky, stigma indistinct, yellowish brown, a dark brown cloud at base of second submarginal cell and of each posterior cell, fourth posterior cell closed or narrowly open. Length 10 mm. Two female specimens. Ormsby County, Nevada. Type No. 6710, U. S. National Museum.

## ACROCERIDAE.

1748 *OGCODES MELAMPUS* Lw. Ormsby County, Nevada.

1749 *Acrocera bakeri* Coquillet, new species.

Black, the four angles of the thorax, legs and halteres whitish, the prothoracic spiracle and abdomen orange yellow, the latter having the first segment, a fascia on the second expanded on the sides and extending across the venter, a small basal spot in middle of dorsum of the third and fourth segments, a large spot on each side of the third segment extending across the venter, in the middle of which it is greatly expanded, a small spot in basal angles of the fourth segment and a pair of spots on venter of this segment; black; tarsal claws and last tarsal joint except the base, also black; wing hyaline, veins black, calypteres wholly whitish hyaline. Length 5 mm. A female specimen. Ormsby County, Nevada. Type No. 6709, U. S. National Museum.

## LONCHOPTERIDAE.

104 *LONCHOPTERA LACUSTRIS* Meig. Stanford University.

985 *LONCHOPTERA LUTEA* Panz. Stanford University and also in the mountains near Claremont, California (1205).

## EMPIDIDAE.

1012 *EMPIS NUDA* Lw. Stanford University.

90 *RAMPHOMYIA COMPTA* Coq. Ormsby County, Nevada.

567 *RHAMPHOMYIA SUDIGERONIS* Coq. Stanford University.

568 *Rhamphomyia curvipes* Coquillet, new species.

Black, the palpi, halteres, legs and greater portion of sides of abdomen, also the venter, yellow, the hairs and bristles black; a black dot at apex of each trochanter, apices of tarsi brown, spiracles of thorax whitish, proboscis dark brown, slightly longer than height of head; face polished on lower part, the remainder thinly gray pruinose, eyes of male contiguous, the upper facets much larger than the lower, front of female thinly gray pruinose next the antennae, the remainder polished, third joint of antennae subconical, about twice as long as the style; thorax thinly gray pruinose, scutellum bearing two bristles, abdomen polished, compressed, hypopygium of male very small, the central filament hidden; legs slender, those of female nearly devoid of bristles except on outer side of hind tibiae, in the male the under side of middle femora on the basal two-thirds, and inner side of their tibiae, ciliate with nearly erect bristles, hind tibiae strongly bowed backwards below the middle, the inner side bare, the posterior-inner side on nearly its basal third, and the anterior-inner side on nearly its basal half ciliate with rather long bristles; wings of male hyaline, those of female pale smoky, stigma brown, venation normal, sixth vein prolonged to the wing-margin. Length 4 mm. Two males and two females. Stanford University. Type No. 7670, U. S. National Museum.

89 *BRACHYSTOMA OCCIDENTALIS* Melander. Ormsby County, Nevada.

1750 *EUHYBUS PURPUREUS* Walker. Ormsby County, Nevada.

1751 *CHELIFERA PALLORIS* Coq. Ormsby County, Nevada.

## DOLICHOPODIDAE.

All determined by Prof. Aldrich, except as otherwise noted.

1014 *DOLICHOPUS AFFLICTUS* OS. Stanford University.

1017 *DOLICHOPUS CANALICULATUS* Thom. Ormsby County, Nevada.  
Determined by Coquillet.

1752 *DOLICHOPUS COQUILLETII* Aldrich. Ormsby County, Nevada.

1015 *DOLICHOPUS CRENATUS* OS. Taken in abundance at Stanford University and in Ormsby County, Nevada: also at Claremont, California (1206).

1539 *DOLICHOPUS CEFPRINUS* Lw. Ormsby County, Nevada.

1753 *DOLICHOPUS GRANDIS* OS. Ormsby County, Nevada.

1754 *DOLICHOPUS MYOSOTA* OS. Ormsby County, Nevada.



- 1540 *DOLICHOPUS OBCORDATUS* Aldrich. Ormsby County, Nevada.  
 1755 *DOLICHOPUS PLUMIPES* Scop. Ormsby County, Nevada.  
 1011 *DOLICHOPUS POLLEX* OS. Ormsby County, Nevada. Determined  
 by Coquillet.  
 1756 *DOLICHOPUS RAMIFER* Lw. Ormsby County, Nevada.  
 1757 *HERCOSTOMUS UNICOLOR* Lw. Ormsby County, Nevada.  
 1009 *CHRYSOTUS SUBCOSTATUS* Lw. Stanford University. Determined  
 by Coquillet.  
 1758 *SCIAPUS FILICORNIS* Ald. Ormsby County, Nevada.  
 158 *PSILOPUS MELAMPUS* OS. Ormsby County, Nevada.

## SYRPHIDAE.

- 1759 *SPHYXIMORPHIA TRIDENS* Lw. Ormsby County, Nevada.  
 146 *CHRYSOTOXUM LATERALE* Lw. Ormsby County, Nevada.  
 137 *OMEGASYRPHUS (Microdon) BALIOPTERUS* Lw. Ormsby County,  
 Nevada.  
 149 *PARAGUS ANGUSTIFRONS* Lw. Ormsby County, Nevada, and also  
 Stanford University (749).  
 1760 *PARAGUS BICOLOR* Fabr. Ormsby County, Nevada.  
 150 *PARAGUS TIBIALIS* Fall. Ormsby County, Nevada.  
 756 *MYIOLEPTA VARIPES* Lw. Stanford University.  
 1761 *CHRYSOGASTER BELLULA* Will. Ormsby County, Nevada, and  
 also Stanford University.  
 91 *CHRYSOGASTER NIGROVITTATA* Lw. Ormsby County, Nevada.  
 1762 *CHRYSOGASTER STIGMATA* Will. Ormsby County, Nevada.  
 1763 ***Cheilosia plumosa*** Coquillet, new species.  
 Black, with a bluish tinge, the third joint of antennae except  
 the apex reddish yellow, halteres light yellow; hairs on upper half  
 of front rather long and black, those on the remainder short and  
 chiefly whitish, upper part of face deeply excavated, the tubercle  
 very prominent and rather pointed, sides of face bearing a series of  
 whitish hairs, eyes bare, third joint of antennae rather large,  
 ellipsoidal, arista rather sparsely long-plumose, hairs of body  
 whitish, scutellum without black marginal bristles, abdomen pol-  
 ished; wings hyaline, the base and stigma yellowish, veins blackish,  
 calypteres white. Length 5.5 mm. Ormsby County, Nevada. Type  
 No. 6711, U. S. National Museum.  
 1764 *CHEILOSIA PLUTONIA* Hunter. Ormsby County, Nevada.  
 1765 *CHEILOSIA WILLISTONI* Snow. Ormsby County, Nevada.  
 995 *PIPIZA PISTICOIDES* Will. Stanford University.  
 148 *MELANOSTOMA STEGNUM* Say. Ormsby County, Nevada, and also  
 Stanford University (37).  
 149 *BACCHA FASCIPENNIS* Wied. Ormsby County, Nevada.  
 1541 *SYRITTA PIPIENS* L. Ormsby County, Nevada, and also Stanford  
 University.

- 147 SYRPHUS AMERICANUS Wied. Ormsby County, Nevada, and also Stanford University (753).  
 1766 SYRPHUS AMALOPIS OS. Ormsby County, Nevada.  
 1767 LASIOPHTHICUS PYRASTRI L. Ormsby County, Nevada.  
 563 MESOGRAMMA GEMINATA Say. Stanford University.  
 152 MESOGRAMMA MARGINATA Say. Ormsby County, Nevada, and also Stanford University (18).  
 151 SPHAEROPHORIA SULPHURIPES Thom. Ormsby County, Nevada, and also Stanford University (16).  
 1220 VOLUCELLA MEXICANA Macq. In the mountains near Claremont, California, common on flowers of *Lepidospartum squamatum* in the Fall.  
 13 ERISTALIS HIRTUS Lw. Stanford University.  
 14 ERISTALIS TENAX L. Stanford University.  
 1768 TROPIDIA QUADRATA Say. Stanford University.  
 145 HELOPHILUS LATIFRONS Lw. Ormsby County, Nevada, and also at Stanford University.  
 1769 HELOPHILUS MEXICANUS Macq. Ormsby County, Nevada, and also at Stanford University.  
 1207 PILOMYIA INTERRUPTA Will. In the mountains near Claremont, California.  
 35 POLYDONTOMYIA CURVIPES Wied. Stanford University.

## CONOPIDAE.

- 108 CONOPS SYLVOSUS Will. Ormsby County, Nevada.  
 107 PHYSOCEPHALA AFFINIS Will. Ormsby County, Nevada, and also Stanford University.  
 106 PHYSOCEPHALA BURGESSI Will. Ormsby County, Nevada.  
 82 ZODION FULVIFRONS Say. Ormsby County, Nevada, and also Stanford University (41).  
 80 OCCEMYA ABBREVIATA Lw. Ormsby County, Nevada, and also Stanford University (998).  
 84 OCCEMYA BARONI Will. Ormsby County, Nevada, and also Stanford University (40).

## AGROMYZIDAE.

- 1272 DESMOMETOPA HALTERALIS Coq. Claremont, California.  
 1273 DESMOMETOPA M-NIGRUM Zett. Claremont, California.  
 1770 LEUCOPIS BELLA Lw. Ormsby County, Nevada.  
 1771 MILICHIA INDECORA Lw. Ormsby County, Nevada.

## PIPUNCULIDAE.

- 1772 PIPUNCULUS ARIDUS Will. Stanford University.

## PHORIDAE.

- 1773 PHORA RUFIPES Meig. Stanford University.  
 1774 TRINEURA ATERRIMA Fabr. Stanford University.

## BORBORIDAE.

- 108 LIMOSINA FONTINALIS Fall. Stanford University.  
 78 BORBORUS EQUINUS Fall. Stanford University.

## GEOMYZIDAE.

- 984 ANTHOMYZA VARIEGATA Lw. Stanford University.  
 99 BALIOPTERA LURIDA Lw. Stanford University, and also in Ormsby county, Nevada.

*Zagonia* Coquillet, new genus.

Near *Heterochroa*, but the cheeks wider than height of eyes, etc. Head slightly longer at insertion of antennae than at the vibrissae, face slightly convex, cheeks greatly widening posteriorly, the lower side of the head very oblique; occiput strongly convex, eyes bare, suborbicular, oblique, front slightly convex, wider than long, two pairs of vertical bristles, one of postvertical and of ocellar, two pairs of reclinate fronto-orbital bristles, front otherwise bare; antennae reaching less than half way to the oral margin, the third joint circular, arista basal, nearly bare, palpi clavate, proboscis very robust, scarcely half as long as height of head; body rather short and robust, mesonotum convex, five pairs of dorsocentral bristles, two of which are in front of the transverse groove, the hairs between them arranged in two rows, two pairs of supra-alar bristles, the anterior one in front of the groove, humeri apparently devoid of bristles, one posthumeral, one propleural, two sternopleural, one bristle and a few hairs near posterior upper angle of the mesopleura, scutellum bearing two pairs of bristles; legs rather short and robust, front femora bristly on the lower and posterior sides, preapical bristle present on the front and hind tibiae; auxiliary vein weak, extending close to the first, apex of the latter nearly opposite the small cross-vein, costa prolonged to apex of fourth vein, beset with distinct spines, apex of second vein about five times as far from apex of first as from that of the third, outer half of first posterior cell with nearly parallel sides, last section of fourth vein one-half longer than the preceding section, sixth vein prolonged nearly to the wing margin, second basal and anal cells complete. Type, the following species:

- 1775 *Zagonia flava* Coquillet, new species.

Yellow, including the hairs and bristles except those of the palpi and costa, third joint of antennae and apical portion of arista

black; wings yellowish gray. Length 2.5 mm. A single specimen. Stanford University, California. Type No. 7680, U. S. National Museum.

#### OSCINIDAE.

- 156 *MEROMYZA AMERICANA* Fh. Occurs in all three regions.  
 39 *CHLOROPS ASSIMILIS* Macq. Stanford University.  
 1776 *CHLOROPS CROCOTA* Lw. Ormsby County, Nevada.  
 1778 *CHLOROPS LITURATA* Adams. Ormsby County, Nevada.  
 1777 *CHLOROPS PROXIMA* Say. Stanford University.  
 557 *CHLOROPS RUBIDA* Coq. Stanford University.  
 1779 *ELACHIPTERA NIGRICEPS* Lw. Ormsby County, Nevada.  
 105 *Hippelates microcentrus* Coquillet, new species.

Black, the lower part of front, sides of face, cheeks, palpi, extreme bases of tibiae, and the tarsi except their apices, yellowish, knobs of halteres white; frontal triangle polished, extending slightly below middle of front; thorax thinly gray pruinose, the pleura, except along the upper edge, polished, abdomen polished; spurs of hind tibiae rather small; wings hyaline, apex of second vein nearly twice as far from that of the first as from the third. Length 1.5 mm. Ten specimens. Stanford University. Type No. 7679, U. S. National Museum.

- 989 *OSCINIS TRIGRAMMA* Lw. Stanford University.  
 1214 *MOSILLUS AENEUS* Fall. Claremont, California, and also in Ormsby County, Nevada.

#### EPHYDRIDAE.

- 1218 *OCHTHERA MANTIS* DeG. In the mountains near Claremont.  
 93 *PELINA TRUNCATELLA* Lw. Ormsby county, Nevada.  
 1271 *PELINA BREVIS* Wlk. In the mountains near Claremont, Cal.  
 1780 *COENIA BISETOSA* Coq. Ormsby County, Nevada.  
 1781 *PSILOPA COMPTA* Meig. Stanford University.  
 102 *HYDRELLIA SCAPULARIS* Lw. Stanford University.  
 987 *PELOMVMIA OCCIDENTALIS* Will. Stanford University.

#### PSILIDAE.

- 1782 *Chyliza robusta* Coquillet, new species.

Black, the head except center and lower part of occiput, the antennae except the arista, the scutellum, coxae, broad apices of femora, and the tibiae, reddish yellow, tarsi pale yellow, halteres whitish, front yellowish brown; hairs pale yellow, the bristles black; face distinctly retreating below, occiput strongly projecting behind the eyes, flattened posteriorly; wings grayish hyaline, marginal cell dark gray, costal cell yellowish brown, third and fourth veins

distinctly converging toward their apices, apex of second vein almost twice as far as from apex of the third. Length 5 mm. A single specimen. Ormsby County, Nevada. Type No. 6717, U. S. National Museum.

#### ORTALIDAE.

19 *ACROSTICTA DICHROA* Lw. Stanford University.

131 *ANACAMPTA PYRRHOCEPHALA* Lw. Ormsby County, Nevada.

1783 *ANACAMPTA LATIUSCULA* Lw. Stanford University.

1784 *Melieria occidentalis* Coquillet, new species.

Black, the head except a central spot on occiput, the antennae, palpi, greater part of proboscis, scutellum, front coxae, femora, tibiae and bases of tarsi, yellow; arista distinctly pubescent; thorax yellowish gray pruinose, that on sides of mesonotum, pleura and scutellum more yellow, abdomen olive gray pruinose; wings hyaline, the hind margin beyond apex of sixth vein rather narrowly bordered with dark gray, a brown crossband extends from costa before apex of auxiliary vein to middle of discal cell near its base, its lower inner angle indistinctly prolonged into base of third posterior cell; a second brown band extends from costa just before apex of first vein to middle of discal cell, passing over the small crossvein; hind cross vein broadly bordered with brown, and above it is a brown spot, on the second vein, a brown streak along the costa in apex of marginal cell; apex of wings broadly bordered with brown, which color is prolonged over halfway to the small crossvein. Length 6 mm. A male specimen. Ormsby county, Nevada. Type No. 6714, U. S. National Museum.

#### TRYPETIDAE.

1785 *Spilographa inaequalis* Coquillet, new species.

Near *tortilis* but the small crossvein is situated distinctly beyond the apex of the first vein and the brown crossband which passes over it is widely separated from the one on the hind crossvein. Yellow, the abdomen reddish yellow, on ocellar dot and the basal segment of the ovipositor black, the latter only slightly longer than the last abdominal segment; bristles and hairs black, body polished; wings hyaline, anal cell and base of the first basal yellowish, a brownish crossband extends from forking of second and third veins to lower and outer angle of anal cell; an arcuate, uneven brown band extends from costa just before apex of first vein almost to center of third posterior cell, passing over the small crossvein; a second uneven band extends from costa nearly midway between apices of first and second veins to apex of fifth vein, passing over the hind crossvein; apex of wing broadly bordered with brown from before apex of second vein to beyond apex of fourth; small crossvein very slightly beyond middle of discal cell; Length 4 mm. A

female specimen. Ormsby county, Nevada. Type No. 6716, U. S. National Museum.

- 1208 *TRYPETA ACHILLEAE* Johnson. In the mountains near Claremont, California. "Not before known to occur west of the District of Columbia" (Coquillet).
- 1786 *TRYPETA OCCIDENTALIS* Snow. Ormsby County, Nevada.
- 1787 *ORDASPIS ANTHRACINA* Doane. Ormsby County, Nevada.
- 141 *ACIURA FERRUGINEA* Doane. Ormsby County, Nevada.
- 1788 *ACIURA LUTEA* Coq. Ormsby County, Nevada.
- 1789 *EUTRETA SPARSA* Wied. Ormsby County, Nevada.
- 140 *EUTRETA TRICOLOR* Snow. Ormsby County, Nevada.
- 22 *TEPHRITIS GEMELLA* Coq. Stanford University.
- 144 *TEPHRITIS GENALIS* Thom. Ormsby County, Nevada.
- 1790 *Tephritis palpalis* Coquillet, new species.

Black, the head and its members except the arista and a large spot on upper half of occiput, the halteres, genitalia and legs pale yellow; hairs of head and body whitish, the bristles black; palpi unusually broad, about half as wide as long, proboscis slender, the labella as long as the proboscis proper; body opaque, bluish gray pruinose; hairs and bristles of femora whitish, the short hairs of tibiae and tarsi chiefly black; wings whitish hyaline, crossed by two brown bands which contain many yellowish dots; the first band extends from humeral crossvein to slightly beyond apex of first vein, then turns and crosses the wing obliquely, passing over the small and hind crossveins, the portion along the costa filling the space between the latter and the fourth vein except an elongated spot along the fourth vein beyond middle of first basal cell; stigma with a yellow spot in its base and a yellow dot beyond its middle; the second band fills apex of wing from before apex of second vein to beyond apex of the fourth. Length 3 mm. A male specimen. Ormsby County, Nevada. Type No. 6716, U. S. National Museum.

- 143 *TEPHRITIS PICCIOLA* Coq. Ormsby County, Nevada.
- 139 *TEPHRITIS VARIABILIS* Doane. Ormsby County, Nevada.
- 138 *EUARESTA ABSTERSA* Lw. Ormsby County, Nevada. Taken also at Stanford University and in the mountains near Claremont, California (1211).
- 564 *Euaresta adspersa* Coquillet, new species.

Head whitish, front except the margins yellow, a large grayish black spot above the center of the occiput, antennae black, the first joint whitish, the second and base of third yellowish brown, base of arista yellow, followed by white, the apex brown; palpi white, proboscis yellow, robust. Thorax black, gray pruinose, scutellum yellow, bearing four bristles. Abdomen yellow, indistinctly marked with grayish black toward the apex, ovipositor black, nearly as long as the last three segments of the abdomen. Legs and halteres yellow. All hairs and bristles yellow or whitish,

several at apices of tibiae and on under side of tarsi black. Wings black and with large whitish hyaline drops and markings: base of wing to apex of auxiliary vein hyaline and with only a few black spots, one crossing first costal cell near the middle, a larger one crossing middle of first and second basal cells; stigma black and with a whitish spot filling nearly its basal half. three hyaline spots between apices of first and second veins alternating with two in the submarginal cell, a single hyaline spot in apex of this cell, first posterior cell with a hyaline spot near base, another in apex and a pair before the latter; second posterior, discal and first basal cells each containing three hyaline spots. Length 3 to 3.5 mm. Two males and two females. Stanford University, California. Type No. 7678, U. S. National Museum.

136 *EUARESTA ARANEOSA* Coq. Ormsby County, Nevada. Taken also at Stanford University (986), and in the mountains near Claremont, California (1210).

1209 *EUARESTA BELLA* Lw. In the mountains near Claremont, California.

1791 *EUARESTA RUFIPENNIS* Doane. Stanford University.

1792 *EUARESTA WEBBII* Doane. Ormsby County, Nevada.

137 *URELLIA MAVERNA* Wlk. Ormsby County, Nevada, and also at Stanford University, California.

1793 *URELLIA STIGMATICA* Coq. Ormsby County, Nevada.

#### SAPROMYZIDAE.

994 *LONCHAEA POLITA* Say. Stanford University.

110 *PALLOPTERA JUCUNDA* Lw. Ormsby County, Nevada.

1794 *Sapromyza caesia* Coquillet, new species.

Head yellow, upper part of occiput and the vertex black, bluish gray pruinose, a brown fascia crosses the front near the middle and a spot of the same color extends from each antennae to the adjacent eye; antennae yellow, the third joint ellipsoidal, about one and one-half times as long as wide, arista rather long plumose, brown, the base yellow; face in profile nearly straight and with a transverse furrow a short distance above the oral margin; proboscis brown, palpi yellow. Body black, bluish gray pruinose, a black fascia at base of segments three, four and five of the abdomen; two pairs of dorso-central bristles, the hairs between them arranged in six somewhat irregular rows. Legs, black, the coxae chiefly, the apices of middle femora, their tibiae except the apices, the base and a median ring on the hind tibiae, extreme base of front tarsi and the whole of the others except their apices, yellow. Wings hyaline, veins yellowish brown, calypteres and halteres yellow. Length 4 mm. A single specimen. Ormsby County, Nevada. Type No. 7676, U. S. National Museum.

983 *SAPROMYZA CONNEXA* Say. Stanford University.

- 20 *SAPROMYZA FLAVEOLA* Coq. Stanford University, and also in the mountains near Claremont, California.
- 1216 *SAPROMYZA LIVINGSTONII* Coq. In the mountains near Claremont, California, and also in Ormsby County, Nevada.
- 555 *SAPROMYZA NOTATA* Fall. Stanford University. Taken also in the mountains near Claremont, California, and in Ormsby County, Nevada.
- 120 *SAPROMYZA PLANISCUTA* Thom. Stanford University, and also Ormsby county, Nevada.
- 1795 *Sapromyza univittata* Coquillet, new species.

Yellow, an ocellar dot, spot near center of occiput, a broad vitta on mesonotum extending from front end almost to the scutellum, an indistinct dot midway between each humerus and this vitta, a spot in middle of first and second segments of abdomen and a widely interrupted fascia on base of each of the remaining segments, black, a rather indistinct brown spot on upper part of face adjoining each eye and a pair of brown dots at extreme apex of each hind femur, hairs and bristles except those on the calypteres, black. Third joint of antennae ellipsoidal, about one and one-half times as long as wide, arista long plumose. Face in profile almost straight. Body thinly grayish pruinose, four pairs of dorsocentral bristles, all of them behind the suture, the hairs between them arranged in four rows. Wings hyaline, the veins chiefly brown. Length 4 mm. A single specimen. Stanford University, California. Type No. 7677, U. S. National Museum.

#### HELOMYZIDAE.

- 111 *HELOMYZA PLUMATA* Lw. Ormsby County, Nevada.
- 75 *HELOMYZA TINETA* Wlk. Stanford University.
- 1796 *Eccoptomera simplex* Coquillet, new species.
- Yellow, the antennae reddish yellow, the arista except the base black, hairs and bristles black; bristly hairs on lower edge of cheeks in a single row, pleura without hairs except on the sternopleura, scutellum with a few short hairs on each side of the middle, hind femora simple, without clusters of hairs or bristles; wings dark gray, toward the base yellowish, spines of costa unusually long, hind crossvein very oblique, the discal cell acutely pointed at the lower outer angle. Length 5 mm. A male specimen. Ormsby county, Nevada. Type No. 6713, U. S. National Museum.

This European genus is now for the first time recorded from this country. It is closely related to *Oecotha* but lacks the bristles on the outer side of the middle tibiae.

- 745 *LERIA (Blepharoptera) PECTINATA* Lw. Stanford University.

#### SCIOMYZIDAE.

- 91 *SCIOMYZA HUMILIS* Lw. Stanford University.
- 100 *SCIOMYZA NANA* Fall. Stanford University.



- 1797 *SCIOMYZA OBTUSA* Fall. Ormsby County, Nevada.  
 76 *TETANOCERA PICTIPES* Lw. Stanford University and also in Ormsby County, Nevada.  
 36 *TETANOCERA PLUMOSA* Lw. Stanford University, and also in Ormsby County, Nevada (135).  
 132 *TETANOCERA SARATOGENSIS* Fh. Ormsby County, Nevada.

## SCATOMYZIDAE.

- 85 *SCATOPHAGA FURCATA* Say. Stanford University, and also in Ormsby County, Nevada.  
 74 *SCATOPHAGA STERCORARIA* L. Stanford University, and also Ormsby County, Nevada.  
 103 *SCATOMYZA APICATA* Thos. Stanford University.

## ANTHOMYIDAE.

- 1798 *HYDROTAEA ARMIPES* Fall. Ormsby County, Nevada.  
 1799 *LIMNOPHORA BOREALIS* Stein. Ormsby County, Nevada.  
 1800 *LIMNOPHORA CYRTONEURINA* Stein. Stanford University, and also in Ormsby County, Nevada.  
 101 *LIMNOPHORA DISCRETA* Stein. Ormsby County, Nevada.  
 997 *OPHYRA LEUCOSTOMA* Wied. Stanford University.  
 90 *HYLEMYIA ALCATHOE* Wlk. Stanford University.  
 92 *HYLEMYIA VARIATA* Fall. Stanford University.  
 65 *MYDAEA AMOEBEA* Stein. Ormsby county, Nevada.  
 95 *MYDAEA NITENS* Stein. Ormsby county, Nevada.  
 1801 *ANTHOMYIA MICROPTERYX* Thom. Stanford University and also in Ormsby county, Nevada.  
 1217 *PEGOMYIA AFFINIS* Stein. In the mountains near Claremont, California.  
 1278 *PEGOMYIA CINERELLA* Fall. Ormsby county, Nevada, and also in the mountains near Claremont, California (1276).  
 96 *PEGOMYIA FUSCICEPS* Zett. Stanford University. Taken also in Ormsby county, Nevada (97), and in the mountains near Claremont, California (1274).  
 46 *PEGOMYIA RUFICEPS* Stein. Stanford University.  
 1802 *Coenosia argentata* Coquillet, new species.

Black, the coxae, trochanters, base of front side of femora, more than the basal half of middle and hind femora and extreme base of each tibia, yellow, halteres whitish; head as broad as high, densely silvery-white pruinose, the occiput more bluish gray; antennae two-thirds as long as the face, white pruinose, the third joint nearly twice as long as the second, the upper edge slightly convex, the lower front corner rather blunt, arista almost bare, thickened on the basal fourth, palpi clavate. Body densely silvery-white pruinose, thorax almost devoid of bristly hairs, two pairs of

presutural dorsocentral bristles but the anterior pair very short, abdomen broadly ovate, about twice as long as broad, sparsely haired, hypopygium projecting two-thirds length of preceding segment of abdomen beyond the latter, its first segment bearing two bristles and a few hairs, its second segment with a few hairs only. Front and middle tibiae with a short bristle near middle of the posterior side, hind ones with a very short bristle near middle of inner-anterior and a long one on outer-anterior side, claws and pulvilli short. Wings hyaline, third and fourth veins outwardly nearly parallel, hind crossvein nearer to apex of fifth vein than to small crossvein, calypteres white. Length slightly over 2 mm. A male specimen. Stanford University, California. Type No. 7675, U. S. National Museum.

988 *COENOSIA CANESCENS* Stein. Stanford University.

1803 *Coensia majuscula* Coquillet, new species.

Black, the halteres, tibiae, trochanters and rather broad apices of the femora, yellowish; head higher than broad, grayish pruinose except the frontal vitta, the gray ocellar triangle prolonged half way to the antennae; the latter two-thirds as long as the face, the second joint whitish pruinose on the upper side, the third one and one-fourth times as long as the second, bluntly rounded at the apex, arista thickened on less than the basal third, pubescent; palpi slender, slightly enlarged at apex. Thorax grayish pruinose, not vittate, two pairs of presutural dorsocentral bristles and three pairs of postsutural, three sternopleurals. Abdomen about three times as long as wide, grayish pruinose and with a pair of black, elongated spots on the second and third segments, hypopygium about two-thirds as long as the preceding segment of abdomen, the first segment nearly twice as long as the second and bearing several bristles, the second bearing only bristly hairs. Front tibiae bearing only a single bristle near middle of the posterior side, middle and hind tibiae with a pair of bristles near the middle, the hind ones also with a very long preapical bristle on the outer side, pulvilli greatly elongated. Wings hyaline, the veins brown, calypteres whitish. Length 4 mm. A male specimen. Stanford University, California. Type No. 7674, U. S. National Museum.

1007 *COENOSIA VERNA* Fabr. Stanford University.

1804 *Lispa polita* Coquillet, new species.

Near *uliginosa*, but the tibiae are black, the abdomen without distinct grayish pruinose portions, etc. Black, the apex of second antennal joint, the palpi and halteres, yellow; face yellowish pruinose, the sides almost wholly covered with short bristly hairs among which are two or three much longer ones opposite the vibrissae, palpi considerably dilated apically, covered with black bristly hairs except on the basal and apical portions of the under side; body polished, the mesonotum thinly brownish pruinose, the

sides and pleura thinly grayish pruinose, an indistinct grayish pruinose dorsal vitta on middle of abdomen of female; three pairs of postsutural dorsocentral bristles, no acrostichals; first tarsal joint at least as long as the following two taken together, pulvilli short, yellowish white, front tibiae each bearing at two-thirds of its length a bristle on the outer-anterior and another on the inner-posterior side, middle femora bristly on nearly the entire length of the under-anterior side, the tibiae with two bristles like the front ones; hind femora bearing four bristles on the under-anterior side, the tibiae with one below middle of the inner-anterior side and three on the outer anterior side; wings hyaline, third and fourth veins toward their apices parallel, calypteres yellowish white. Length 4 to 6 mm. One male and four females. Ormsby county, Nevada. Type No. 6712, U. S. National Museum.

109 *SCHOENOMYZA CHRYSOSTOMA* Lw. Stanford University.

99 *SCHOENOMYZA DORSALIS* Lw. Ormsby County, Nevada.

1805 *GYMNOPHANIA MONTANA* Coq. Ormsby County, Nevada. "This species has no hypopleural bristles, and if the type species of *Gymnophania* is congeneric with *montana*, the authors of the genus, Brauer and Bergenstamm, were in error in placing it in the Tachinidae" (Coquillet).

1806 *Phaonia fimbriata* Coquillet, new species.

Near *septentrionalis* but the spines of the front tibiae of the male are four in number and are arranged in a single row. Black, the halteres brown; frontal vitta narrower than the lowest ocellus. eyes rather densely pilose, longest hairs of arista slightly longer than its greatest diameter; body slender, mesonotum and scutellum not distinctly gray pruinose except along the sides of the former, four pairs of postsutural dorsocentral bristles, sternopleurals 1 and 1; abdomen gray pruinose, a median blackish vitta expanded at the hind end of the second and third segments, hairs of dorsum rather long and chiefly erect, venter simple, hypopygium polished; front tibiae bearing a row of four spines on the apical third of the posterior side; middle femora on the under side bearing short hairs only, their tibiae with only about three very short bristles, situated on the posterior side; hind femora with short hairs on the under side and with bristles on the apical third of the anterior under side, hind tibiae ciliate along the anterior inner side with long, slender bristles, along the outer side with bristles of an unequal length, and along the posterior-inner side except on the basal third with rather long bristly hairs; wings hyaline, slightly brownish at the base, costa not spined, auxiliary spine minute, fourth vein toward its apex diverging from the third; calypteres yellowish white. Length 5 mm. Two males. Ormsby County, Nevada. Type No. 7673, U. S. National Museum.

125 *PHAONIA NIGRIPENNIS* Wlk. Very common in Ormsby County, Nevada.

- 1807 PHAONIA PUNCTATA Stein. Ormsby County, Nevada.  
 64 PHAONIA RUFITIBIA Stein. Ormsby County, Nevada.  
 1808 PHAONIA VARIPES Coq. Stanford University.

## OESTRIDAE.

- 112 CUTEREBRA BUCCATA Fab. Ormsby County, Nevada. During some of the very hot days the walls of the tents were tied up and these magnificent flies, buzzing slowly over the surface of the ground, would pass beneath them, where they were promptly captured by my wife as she sat at the plant tables.

## SARCOPHAGIDAE.

- 748 HELICOBIA HELICIS Twil. Stanford University and also in Ormsby County, Nevada.  
 1809 HELICOBIA QUADRISSETOSA Coq. Stanford University.

## MUSCIDAE.

- 1810 STOMOXYS CALCITRANS L. Stanford University.  
 1282 MUSCA DOMESTICA L. Abundant everywhere.  
 1811 POLLENIA RUDIS Fabr. Stanford University.  
 72 CALLIPHORA COLORADENSIS Hough. Stanford University.  
 746 CALLIPHORA LATIFRONS Hough. Stanford University.  
 33 CHRYSOMYIA MACELLAEIA Fabr. Stanford University.  
 980 LUCILIA CAESAR L. Stanford University.  
 976 LUCILIA SERICATA Meig. Stanford University.  
 978 PHORMIA REGINA Meig. Stanford University and also in Ormsby County, Nevada.  
 996 MORELLIA MICANS Macq. Stanford University.  
 977 PSEUDOPYRELLA CORNICINA Fabr. Stanford University, and also in Ormsby county, Nevada (1265).  
 999 MYOSPILA MEDITABUNDA Fabr. Common in all three regions.

## TACHINIDAE and DEXIDAE.

- 1812 *Admontia setigera* Coquillet, new species.

Black, the second joint of antennae, cheeks, palpi, halteres and trochanters, yellowish; vertex slightly narrower than either eye, uppermost frontal bristles almost erect, reclinate, frontal bristles descending nearly to apex of second joint of antennae, sides of face at narrowest point one-fourth as wide as the facial depression, bearing a row of bristles extending slightly below end of eyes as if in continuation of the frontal row, otherwise bare except on the upper portion, vibrissae scarcely above front edge of the oral margin, three or four bristles above each; antennae about six-sevenths as long as the face, the third joint slightly over three times as long as the second, arista thickened on the basal two-fifths, cheeks one-third as wide as the eye-height. Body thinly whitish pruinose, mesonotum marked with four black vittae, three pairs of postsutural dorsocentral bristles, three sternopleurals on a curved row,

abdomen bearing only marginal bristles on the second and third segments and discal and marginal ones on the fourth, venter devoid of spines. Middle tibiae bearing a single bristle on the front side near the middle, front-tarsi not dilated. Wings hyaline, third vein bristled more than half way to the small cross vein. Calypteres white. Length 6 mm. A female specimen. Stanford University, California. Type No. 7671, U. S. National Museum.

1813 *BIOMYA GEORGIAE* Br. & Berg. Ormsby county, Nevada.

1814 *Biomya mutabilis* Coquillet, new species.

Black, the frontal lunule, first joint of antennae, apex of second and base of the third joint, also the palpi, yellowish; vertex about as wide as either eye, two pairs of orbital bristles, frontals descending nearly to apex of second joint of antennae, sides of face at narrowest part slightly over one-third as wide as the facial depression, bare on the lower half, the remainder with short sparse hairs, like the front; vibrissae situated slightly more than length of second antennal joint above anterior edge of oral margin, four or five bristles above each; antennae two-thirds as long as the face, the third joint slightly over twice as long as the second, arista bare, thickened on the basal third, cheeks slightly over one-third as wide as the eye-height. Thorax gray pruinose, mesonotum marked with four black vittae, four pairs of postsutural dorsocentral bristles, three sternopleurals. Abdomen gray pruinose and with darker reflecting spots, the first three segments bearing only marginal bristles. Middle tibiae bearing two stout bristles on the front side near the middle, hind tibiae not fringed. Wings hyaline, third vein bearing three bristles near the base. Calypteres whitish. Length, 8.5 mm. A female specimen. Ormsby county, Nevada. Type No. 7672, U. S. National Museum.

1815 *CELATORIA DIABROTICAE* Shimer. Stanford University.

31 *CISTOGASTER IMMACULATA* Mcq. Stanford University.

63 *CRYPTOMEIGENIA THEUTIS* Wlk. Ormsby county, Nevada.

122 *ECHINOMYIA ALGENS* Wied. Ormsby county, Nevada.

123 *ECHINOMYIA DAKOTENSIS* Twn. Ormsby county, Nevada.

1816 *EPIGEIMYIA SETIGERA* Coq. Stanford University.

1817 *EXORISTA NIGRIPALPIS* Twn. Ormsby county, Nevada.

75 *EXORISTA PYSITE* Wlk. Ormsby county, Nevada.

1818 *EXORISTA TRISETOSA* Coq. Ormsby county, Nevada.

76 *FRONTINIA FRENCHII* Will. Ormsby county, Nevada.

1819 *GONIA CAPITATA* DeG. Ormsby county, Nevada, and also at Stanford University.

26 *GRAPHOMYIA MACULATA* Scop. Stanford University.

81 *GYMNOSOMA FULIGINOSA* Desv. Ormsby county, Nevada, and also at Stanford University (32).

1820 *HETEROPTERNIA NASONI* Coq. Ormsby county, Nevada.

1821 *HILARELLA ARISTALIS* Coq. Stanford University.

1822 *HILARELLA SIPHONINA* Zett. Ormsby county, Nevada.

- 43 *HYALOMYODES TRIANGULIFERA* Lw. Stanford University.  
 1004 *HYPOSTENA TORTRICIS* Coq. Stanford University.  
 1823 *LEUCOSTOMA ATRA* Twn. Stanford University, and also in Ormsby county, Nevada.  
 1824 *LEUCOSTOMA NEOMEXICANA* Twn. Stanford University.  
 1825 *METACHAETA HELYMUS* Wlk. Ormsby county, Nevada.  
 1826 *METOPTIA LEUCOCEPHALA* Rossi. Ormsby county, Nevada.  
 115 *MYIOPHASIA AENEA* Wied. Ormsby county, Nevada.  
 30 *MYOCERA TIBIALIS* Desv. Stanford University and also in Ormsby county, Nevada.  
 127 *OCYPTERA CAROLINAE* Desv. Ormsby county, Nevada and also at Stanford University.  
 48 *PACHYOPHTHALMUS FLORIDENSIS* Twn. Stanford University, and also in Ormsby county, Nevada.  
 45 *PARADIDYMA SINGULARIS* Twn. Stanford University, and also in Ormsby county, Nevada.  
 1827 *PELETERIA ROBUSTA* Wied. Ormsby county, Nevada.  
 27 *PHORANTHA OCCIDENTALIS* Wlk. In great abundance at Stanford University, and also in Ormsby county, Nevada (66).  
 559 *PHORICHAETA SEQUAX* Will. Stanford University, and also in Ormsby county, Nevada.  
 1828 *PHOROCERA FACIALIS* Coq. Ormsby county, Nevada.  
 74 *PHOROCERA SAUNDERSII* Will. Ormsby county, Nevada.  
 1829 *PLAGIOPSPHERYSA PARVIPALPIS* v. d. W. Ormsby county, Nevada.  
 44 *PLUSIA BREVIROSTRIS* Coq. Stanford University.  
 1005 *SENOTAINIA DECISA* Twn. Stanford University.  
 1830 *SENOTAINIA RUBRIVENTRIS* Macq. Ormsby county, Nevada.  
 47 *SENOTAINIA TRILINEATA* v. d. W. Common in all three regions.  
 1006 *SIPHONA PLUSIAE* Coq. Stanford University.  
 1277 *SIPHOSTURMIA ROSTRATA* Coq. Claremont, California.  
 34 *SPALLANZANIA HESPERIDARUM* Will. Stanford University.  
 740 *STURMIA OCCIDENTALIS* Coq. Stanford University.  
 739 *TACHINA MELLA* Wlk. Stanford University.  
 1831 *TACHINA ROBUSTA* Twn. Ormsby county, Nevada.  
 77 *TACHINA RUSTICA* Fall. Ormsby county, Nevada.  
 1832 *TRICHOPODA PENNIPES* Fabr. Stanford University.  
 130 *WAHLBERGLIA BREVIPENNIS* Lw. Common in Ormsby county, Nevada.  
 87 *XANTHOMELANA ARCUATA* Say. Occurs sparingly in all three regions.

## ADDENDA.

- 92 *METATRICHIA BULBOSUS* OS. Ormsby county, Nevada.  
 101 *PLATYPALPUS AEQUALIS* Lw. Stanford University.  
 1630 *Scleropogon jubatus* Coquillet, new species.

Black, the halteres, apices of first two pairs of femora, broad bases of their tibiae and of the joints of their tarsi, yellowish; hairs and bristles of face, antennae, front and upper part of occiput, black, remaining ones of head and those on the palpi dull whitish; style of antennae nearly one-half as long as the third antennal joint, hairs and bristles of body and legs whitish, those on the scutellum and along middle of mesonotum black, the latter unusually long and nearly erect; hairs on basal half of abdomen also unusually long; thorax grayish pruinose, mesonotum marked with four blackish vittae, abdomen somewhat polished; wings grayish brown, the base nearly to base of discal cell except in the costal and marginal cells, white, first and fourth posterior cells open; mesopleura and hypopleura bare. Length, 22 mm. A male specimen. Claremont, Los Angeles county, California. Type No. 7732, U. S. National Museum.

1623 **Leptomydas hirtus** Coquillet, new species.

Black, the hind margins of the abdominal segments except two spots on the second, genitalia, venter of abdomen, trochanters, femora, tibiae and tarsi, yellow; scutellum reddish yellow, halteres yellowish brown; occiput, face and sides of front densely beset with bright yellow hairs; sides of mesonotum densely covered with similar hairs which on the front end extend inward nearly to the middle and then backward almost to a patch of these hairs in front of the scutellum; a patch of similar hairs above the front coxae and a larger one above the hind coxae, also one in front of the halteres; sides of first abdominal segment, basal half of the second, apical two-thirds of the three following, nearly the whole of the sixth and the whole of the seventh densely beset with hairs of the same bright yellow color; wings hyaline, base of second submarginal cell devoid of a stump of a vein, first posterior cell closed; lamellae of antennae unusually broad, obovate, less than twice as long as wide, proboscis nearly reaches apex of the third antennal joint. Length 11 mm. A male specimen. Claremont, Los Angeles county, California. Type No. 7731, U. S. N. M.

— **Leptomydas concinnus** Coquillet, new species.

A second species which also occurs in Los Angeles county, Cal. is remarkably like *hirtus* but the lamellae of the antennae are chiefly orange-yellow and over twice as long as wide, and the scutellum is black. The abdomen of the female has yellow hairs on the first two segments only.

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## TWO NEW SIPHONAPTERA.

BY C. F. BAKER.

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— **Anomiopsyllus Californicus** n. sp.

The second species of this very interesting genus has been found at Claremont, Los Angeles County, California, on *Spilogale phenax*. It agrees with *nudatus* in all generic